=> FILE REG
FILE 'REGISTRY' ENTERED AT 16:53:35 ON 25 JUN 2009
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
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=> DISPLAY HISTORY FILL L1-

=> D	ISPLAY	HISTORY FULL L1-
L2 L3	FILE '	'LREGISTRY' ENTERED AT 14:49:09 ON 25 JUN 2009 E COPPER PHTHALOCYANINE/CN 1 SEA "COPPER PHTHALOCYANINE"/CN D RN STR 147-14-8
L4 L5		'REGISTRY' ENTERED AT 14:51:04 ON 25 JUN 2009 50 SEA SSS SAM L3 9400 SEA SSS FUL L3 SAV L5 JOH373/A
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L12 L13 L14		'LREGISTRY' ENTERED AT 15:01:21 ON 25 JUN 2009 STR L10 STR L12 STR L12
L15 L16		'REGISTRY' ENTERED AT 15:04:45 ON 25 JUN 2009 2 SEA SUB=15 SSS SAM (L13 OR L14) 15 SEA SUB=L5 SSS FUL (L13 OR L14)

SAV L16 JOH373A/A

L17 L18		ISTRY' ENTERED AT 15:06:02 ON 25 JUN 2009 STR L3 STR L17
L19 L20	1	STRY' ENTERED AT 15:07:51 ON 25 JUN 2009 SEA SUB=L5 SSS SAM (L17 OR L18) SEA SUB=L5 SSS FUL (L17 OR L18) SAV L20 JOH373B/A
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L23 L24 L25 L26	11 42 9	ENTERED AT 15:09:48 ON 25 JUN 2009 SEA L16 SEA L20 SEA 1808-2002/PY,PRY,AY AND L23 SEA 1808-2002/PY,PRY,AY AND L24
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L29	344	ROSS(W)LINK; OR CROSSLINK;)/DI,AB SEA (PHOTORX## OR PHOTOREACT? OR PHOTOSENS? OR PHOTOCUR? OR PHOTOCARS? OR PHOTOCAT?)/BI,AB
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L31	116960	SEA RESIST OR RESISTS OR PHOTORESIST?
L32		SEA MASK? OR PHOTOMASK?
L33	3	SEA L26 AND (L30 OR L31 OR L32)
L34	245056	SEA SOLDER? OR BRAZ? OR WELD?
L35		SEA L26 AND L34
L36		SEA L26 AND (L27 OR L28 OR L29)
L37	1182580	SEA (MIXT# OR MIXTURE? OR BLEND? OR ADMIX? OR COMMIX? OR IMMIX? OR INTERMIX? OR COMPOSIT? OR COMPN# OR COMPSN# OR FORMULAT? OR INTERSPER?)/TI

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L38 5 SEA L26 AND L37
L39 7 SEA L33 OR L35 OR L36 OR L38
L40 7 SEA 1808-2002/PY,PRY,AY AND L39
L41 34 SEA L24 NOT (L25 OR L40)
L42 33 SEA 1808-2002/PY,PRY,AY AND L41
SAV L42 J0H373C/A
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FILE 'REGISTRY' ENTERED AT 16:53:35 ON 25 JUN 2009

NODE ATTRIBUTES: DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED

=> D L16 QUE STAT

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RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 41

STEREO ATTRIBUTES: NONE L5 9400 SEA FILE=REGISTRY SSS FUL L3

L13 STR

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GRAPH ATTRIBUTES: RSPEC 42 NUMBER OF NODES IS 50

STEREO ATTRIBUTES: NONE L14 STR

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GRAPH ATTRIBUTES: RSPEC 42

NUMBER OF NODES IS 49

100.0% PROCESSED 9400 ITERATIONS SEARCH TIME: 00.00.01 15 ANSWERS

=> D L20 QUE STAT L3 STR

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GRAPH ATTRIBUTES: RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 41

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STEREO ATTRIBUTES: NONE L18 STR

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GRAPH ATTRIBUTES:
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NUMBER OF NODES IS 42

STEREO ATTRIBUTES: NONE

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100.0% PROCESSED 9400 ITERATIONS SEARCH TIME: 00.00.01 57 ANSWERS

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FILE 'HCA' ENTERED AT 16:54:49 ON 25 JUN 2009
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PLBASE SEE "HELP USAGETERMS" FOR DETAILS.

(FORMULA 2)

```
=> D L25 1-9 BIB ABS HITSTR HITRN RE
    ANSWER 1 OF 9 HCA COPYRIGHT 2009 ACS on STN
L25
AN
    141:44857 HCA Full-text
    Photosensitive resin composition comprising halogen-free colorant
TΙ
IN Oka, Hidetaka; Adam, Jean-Marie
PA
   Ciba Specialty Chemicals Holding Inc., Switz.
SO
  PCT Int. Appl., 21 pp.
    CODEN: PIXXD2
DT
    Patent
LA
    English
FAN.CNT 1
    PATENT NO. KIND DATE APPLICATION NO. DATE
PI WO 2004049070 A2 20040610 WO 2003-EP50849
                                                                200311
                                                                19
                                               <--
    WO 2004049070
                        A3 20040722
            AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA,
            CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
            GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP,
            KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,
            MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE,
            SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC,
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            DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO,
            SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,
            MR, NE, SN, TD, TG
                        A1
                             20040610 CA 2003-2507471
    CA 2507471
                                                                200311
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    AU 2003298293 A1 20040618 AU 2003-298293
                                                                200311
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CN	1717	627			A	2006	0104	(CN		()3-8	3010	4325		00311
JP	2006	5083	81		T	2006	0309		JP		()4-5	5545	39	2	00311
US	2005	0282	923		A1	2005	1222	1	US		()5-5	353	73		00505
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IN	2005	CN01	406		A	2007	0803		IN		:)5-0	N14	06	2	7

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200506 24

PRAI EP 2002-406035 A 20021128 <--WO 2003-EP50849 W 20031119

OS MARPAT 141:44857

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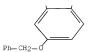
- The present invention relates to a photosensitive resin compn. for AB solder resists comprising as a component (A) a green colorant of the formula I (rings A, B, C and D are substituted by hydroxy or by moiety; R, R2 = H, C1-4-alkyl; n = 0-3; ring E = unsubstituted or substituted by C1-6-alkyl, C1-6-alkoxy, hydroxy, NHCOR3, NHSO2, R4 or SO2NHR5; R3, R4, R5 = C1-4-alkvl; Ph); as a component (B) an alkali sol, oligomer or polymer reactive or unreactive; as a component (C) a polymerizable monomer; as a component (D) a photoinitiator; as a component (E) an epoxy compd.; and also, if desired, as a component (F) further additives. The photosensitive compn. can be used as solder resist, etching resist or plating resist in the manuf. of printed circuit boards. The inventive solder resist comprising a single green pigment that maintains qualities required as a green coloring material, such as clear hue, good weather- and heat resistance and that is satisfactory at the same time in the points of environmental pollution, has not been found yet in the present state of the art.
- IT 227101-11-3 290821-67-9 667865-45-4

(photosensitive resin compn. comprising halogen-free colorant)

RN 227101-11-3 HCA CN Copper, [2,9,16,:

Copper, [2,9,16,23-tetrakis(phenylmethoxy)-29H,31H-phthalocyaninato(2-)-kN29,kN30,kN31,kN32]-, (SP-4-1)- (9C1) (CA INDEX NAME)

- O- CH2-Ph



PAGE 3-A

RN 290821-67-9 HCA
CN Copper, [C,C,C,C-tetrakis(phenylmethoxy)-29H,31H-phthalocyaninato(2-)-kN29,kN30,kN31,kN32]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ &$$

4 [D1-O-CH2-Ph]

PAGE 2-A

RN 667865-45-4 HCA
CN Copper, [1,8,15,22-tetrakis(phenylmethoxy)-29H,31H-phthalocyaninato(2-)-kN29,kN30,kN31,kN32]-,
(SP-4-1)- (9CI) (CA INDEX NAME)

PAGE 2-A

IT 227101-11-3 290821-67-9 667865-45-4

(photosensitive resin compn. comprising halogen-free colorant)

RE

- (1) Anon; US 20020136986 A1
- (2) Anon; US 5009982 A HCA
- (3) Anon; US 5789137 A HCA
- L25 ANSWER 2 OF 9 HCA COPYRIGHT 2009 ACS on STN
- AN 140:243677 HCA Full-text
- TI Liquid crystal display and color filter with improved transparency for green light
- IN De Keyzer, Gerardus; Yousaf, Taher; Ekkundi, Vadiraj Subbanna; Mudaliar, Chandrasekhar Dayal
- PA Ciba Specialty Chemicals Holdings Inc., Switz.

SO PCT Int. Appl., 22 pp.

CODEN: PIXXD2

EP 1534714

DT Patent LA English

FAN.CNT 1

1 1114 .	PATENT NO.					KIN	D -	DATE			APPL	ICAT	ION :	NO.		D.	ATE
ΡI	WO	2004	- 0184	77		A2		2004	0304		WO 2	003-	EP86	54		2	00308
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		PT,	IE,	SI,	LT,	LV,	FΙ,	RO,	MK,	CY,	AL,	TR,	BG,	CZ,	EE,	HU,	
		SK															

CN 1675216	A	20050928	CN 2003-819444	
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A2 20050601 EP 2003-792254

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200308 05

200308 05

CN	100360535	C	20080109		
JP	2006510039	T	20060323	JP	2004-530083

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AT 362477	T	20070615	< AT 2003-792254	
A1 3024//	-	20070013	A1 2005 /52254	200308
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				20030 8 13
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US 20060060829	A1	20060323	US 2005-523742	
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			<	02
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IN 2005CN00376	A	20070406	IN 2005-CN376	200503
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PRAI IN 2002-MA600	A	20020814	<	
IN 2002-CH600	A	20020814	<	
WO 2003-EP8654	W	20030805		
OS MARPAT 140:243677				

AB

The invention relates to novel lig. crystal displays comprising a broad backlight emission around 530 nm and a green color filter contg. a phthalocyanine colorant, most adequately tetrahydroxy- or tetraalkoxy-substituted but lacking solubilizing groups. The purpose of the invention is to provide a liq. crystal display having better transmittance for green light and efficient absorption for red light (particularly from 600-620 nm), with a steep slope between green and red as well as good light stability.

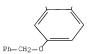
227101-11-3P 667865-45-4P ΙT

> (liq. crystal display and color filter with improved transparency for green light)

RN 227101-11-3 HCA CN

Copper, [2,9,16,23-tetrakis(phenylmethoxy)-29H,31Hphthalocvaninato(2-)-KN29,KN30,KN31,KN321-, (SP-4-1)- (9CI) (CA INDEX NAME)

- O- CH2-Ph



PAGE 3-A

RN 667865-45-4 HCA
CN Copper, [1,8,15,22-tetrakis(phenylmethoxy)-29H,31Hphthalocyaninato(2-)-kN29,kN30,kN31,kN32]-,
(SP-4-1)- (9CI) (CA INDEX NAME)

PAGE 2-A

IT 227101-11-3P 667865-45-4P

(liq. crystal display and color filter with improved transparency for green light)

RE

(1) Anon; WO 0204563 A1 HCA

(2) Anon; EP 0519423 A2 HCA

(3) Anon; EP 0531106 A1 CAPLUS

(4) Anon; EP 0896327 A1 HCA

(5) Anon; EP 0965874 A2 HCA

(6) Anon; EP 1168048 A1 CAPLUS

(7) Anon; WO 9526381 A1 HCA

L25 ANSWER 3 OF 9 HCA COPYRIGHT 2009 ACS on STN

AN 133:209279 HCA Full-text

- TI Phthalocyanine dyes for ink jet recording inks with good storage stability and resistance to light and water
- IN Matsuzaki, Yoriaki; Ohkuma, Tadashi; Ohi, Toru
- PA Mitsui Chemical Industry Co., Ltd., Japan
- SO Jpn. Kokai Tokkyo Koho, 14 pp. CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

r r	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
P.	 I JP 2000239584	A	20000905	JP 1999-44512	199902 23

19990223 <--

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PRAI JP 1999-44512

OS MARPAT 133:209279

GΙ

AB The inks contain phthalocyanine-type dyes I (R1-16 = H, halogen, alkyl, alkoxy, aryl, aryloxy, carboxylic acid ester, amide provided that R1-16 never be all H or halogen; M = 2 H atoms, divalent metals, substituted metals with 3-4 valency or their oxides). Thus, heating nitrobenzene 30 with urea 10.4 to 130°, combining with 5-(N,N-

Ι

diisopentylcarbamoyl)phthalic anhydride 4.1, ammonium molybdate tetrahydrate 0.3 and cupric chloride dihydrate 0.7 parts, and heating at 180° for 5 h gave a dye 10 parts of which was mixed with a polyester binder 100, MEK 150, THF 150 and water 600 parts, filtered, devolatilized and adjusted to 20% solid concn. with water to give an ink dispersion contg. particles with diam. 0.2 μm and good printability.

IT 290821-67-9

RN

(dyes; manuf. of phthalocyanine dyes for ink jet recording inks with good storage stability and resistance to light and water) 290821-67-9 HCA

CN Copper, [C,C,C,C-tetrakis(phenylmethoxy)-29H,31H-phthalocyaninato(2-)-kN29,kN30,kN31,kN32]- (9CI) (CA INDEX NAME)

PAGE 1-A



4 □ D1-O-CH2-Ph]

TT 290821-67-9

(dyes; manuf. of phthalocyanine dyes for ink jet recording inks with good storage stability and resistance to light and water)

L25 ANSWER 4 OF 9 HCA COPYRIGHT 2009 ACS on STN

AN 133:10980 HCA Full-text

Electrophotographic toner containing near-IR absorber TΙ

IN Matsuzaki, Yoriaki; Ohi, Toru

PA Mitsui Chemicals Inc., Japan; Yamamoto Chemicals Inc.

SO Jpn. Kokai Tokkyo Koho, 10 pp. CODEN: JKXXAF

DT Patent

LA Japanese

FAN.	CNT 1				
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	JP 2000147824	A	20000526	JP 1998-316467	
					199811
					06

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PRAI JP 1998-316467 OS MARPAT 133:10980 19981106 <--

GI

- AB The electrophotog. toner contains a near-IR absorber represented by I (R1,2 = alkyl; R3 = H, nitro; R4,5 = H, alkyl, aryl, etc.; M = 2 H atoms, divalent metal atom, tri- or tetravalent metal, oxymetal). The toner is used for a flash fixing, and the near-IR absorber provides excellent optical-to-thermal conversion efficiency.
- IT 270583-07-8 270583-08-9

(electrophotog. toner contg. near-IR absorber)

RN 270583-07-8 HCA

CN Copper, [C,C,C,1-tetranitro-5,9,14,18,23,27,32,36 octakis(phenylmethoxy)-37H,39H-tetranaphtho[2,3-b:2',3'-g:2'',3'' 1:2''',3'''-q]porphyrazinato(2-) KN37,KN38,KN39,KN40]- (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 2-A

4 [D1-NO2]

PAGE 2-A

- IT 270583-07-8 270583-08-9 (electrophotog. toner contg. near-IR absorber)
- L25 ANSWER 5 OF 9 HCA COPYRIGHT 2009 ACS on STN
- AN 131:52320 HCA Full-text
- TI Mesomorphism of tetra-4-alkoxy- and tetra-4-aryloxy-substituted phthalocyanines of copper
- AU Bykova, V. V.; Usol'tseva, N. V.; Anan'eva, G. A.; Shaposhnikov, G. P.; Maizlish, V. E.
- CS Ivanov. Gos. Univ., Russia
- SO Izvestiya Akademii Nauk, Seriya Fizicheskaya (1998), 62(8), 1647-1651
- CODEN: IRAFEO; ISSN: 1026-3489
- PB Nauka
- DT Journal
- LA Russian

AB The synthesis and thermotropic and lyotropic mesomorphism of copper complexes of alkoxy- and aryloxy-substituted phthalocyanines were investigated. In org. solvents (chloroform and dimethylformamide) [tetrakis[4-(4-phenylazo)phenoxy]phthalocyaninato]copper and [tetrakis(4-benzyloxy)phthalocyaninato]copper form at room temp. lyomesophase textures of chromonic type [schlieren (N-phase) and spheroidal (M-phase)], although thermotropic mesomorphism was not obsd.

IT 227101-11-3P

CN

(prepn. and lyotropic liq. crystal properties with ${\tt DMF})$

RN 227101-11-3 HCA

Copper, [2,9,16,23-tetrakis(phenylmethoxy)-29H,31H-phthalocyaninato(2-)-kN29,kN30,kN31,kN32]-, (SP-4-1)- (9CI) (CA INDEX NAME)

PAGE 1-A

PAGE 2-B



IT 227101-11-3P

(prepn. and lyotropic liq. crystal properties with DMF)

L25 ANSWER 6 OF 9 HCA COPYRIGHT 2009 ACS on STN

AN 126:48352 HCA <u>Full-text</u>

OREF 126:9527a,9530a

 $\ensuremath{\text{TI}}$ Dyes for color filters, and photosensitive resin compositions containing them

IN Itoh, Hisato; Karasawa, Akio; Sugimoto, Kenichi

PA Mitsui Toatsu Chemicals, Inc., Japan

SO U.S., 35 pp., Cont.-in-part of U.S. Ser. No. 987,960, abandoned. CODEN: USXXAM

DT Patent

LA English

FAN.CNT 2									
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	US	5789137	A	19980804	US	1996-653252	199605 24		
						<			
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	US	1992-987960	B2	19921211	<				

US 1994-223605 A3 19940406 <--US 1996-653252 A3 19960524 <--US 1998-87845 A3 19980601 <--

OS MARPAT 126:48352

AB

Dyes suitable for use in the fabrication of color filters are represented by D(AYn1)n2, where D represents a chromophoric (di)phenoxy- or (phenylthio)anthraquinone nucleus, A denotes a connecting group, Y is a photopolymerizable group having one of several specified structures, n1 is 1-10,000, and n2 is 1-10. Thus, 1-amino-4-hydroxy-2-(p-tolyloxy)anthraquinone was condensed with N-(chloromethyl)-2-phenylmaleimide in C2H4C12 in the presence of ZnC12 to give a dye with \max 512 nm.

IT 151605-29-7P

(dyes for color filters and photosensitive resin compns. contg. them)

RN 151605-29-7 HCA

NN 151005-29-/ HCA
COpper, [[29H,31H-phthalocyanine-1,8,15,22tetrayltetrakis(oxymethylene-4,1-phenylene)
tetrabenzoato](2-)-N29,N30,N31,N32]-, (SP-4-1)- (9CI) (CA INDEX NAME)

PAGE 1-A

IT 151605-29-7P

RE

(dyes for color filters and photosensitive resin compns. contg. them)

(1) Anon; EP 0098522 A2 HCA

- (2) Anon; EP 0168694 A1 HCA
- (3) Anon; EP 0300770 A2 HCA
- (4) Anon; EP 0359934 A1 HCA
- (5) Anon; EP 0371398 A2 HCA
- (6) Anon: GB 2038849 A HCA
- (7) Anon; US 3627472 A HCA
- (8) Anon; US 4132841 A HCA
- (9) Anon; US 4614521 A HCA
- (10) Anon; US 4808501 A

(11) Anon; US 5212027 A

L25 ANSWER 7 OF 9 HCA COPYRIGHT 2009 ACS on STN

AN 120:41990 HCA Full-text

OREF 120:7549a,7552a

- TΙ Dyes for color filters, photosensitive resist resin compositions containing the same, and color filters
- IN Karasawa, Akio; Itoh, Hisato; Sugimoto, Kenichi
- PA Mitsui Toatsu Chemicals, Inc., Japan
- SO Eur. Pat. Appl., 38 pp. CODEN: EPXXDW
- DT Patent
- LA English

CNT	

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	EP 546856	A2	19930616	EP 1992-311343	199212 11
				<	
	EP 546856	A3	19940525		
	EP 546856 R: DE, FR, (B1 GB, NL	20010822		
	JP 05271567	A	19931019	JP 1992-327842	199212 08
				<	
	EP 832942	A2	19980401	EP 1997-118306	199212
				<	11
	EP 832942	A3	20000531	\	
	R: DE, FR, 0				
PRAI	JP 1991-328474	A	19911212	<	
	EP 1992-311343	A3	19921211	<	

AB Dyes suitable for use in the fabrication of color filters contain one or more photopolymerizable substituents which may preferably be represented by the following formula: D-(A-Yn1)n2 wherein D represents a chromophoric nucleus, A denotes a connecting group, Y means the photopolymerizable group, n1 is 1-10000, and n2 stands for an integer of 1-10. Also described are photosensitive resist resin compns. contg. the dyes as well as color filters fabricated by curing the photosensitive resist resin compns.

IT 151605-29-7

(photopolymerizable dye)

RN 151605-29-7 HCA

CN Copper, [[29H,31H-phthalocyanine-1,8,15,22-

tetrayltetrakis(oxymethylene-4,1-phenylene)

tetrabenzoato](2-)-N29,N30,N31,N32]-, (SP-4-1)- (9CI) (CA INDEX NAME)

PAGE 2-A

IT 151605-29-7

(photopolymerizable dye)

- L25 ANSWER 8 OF 9 HCA COPYRIGHT 2009 ACS on STN
- 105:24734 HCA Full-text AN
- OREF 105:4175a,4178a
- TΙ Synthesis of polyphosphazenes bearing covalently linked copper phthalocyanine units
- ΑU Allcock, Harry R.; Neenan, Thomas X.
- CS Dep. Chem., Pennsylvania State Univ., University Park, PA, 16802,
- SO Macromolecules (1986), 19(6), 1495-501 CODEN: MAMOBX; ISSN: 0024-9297
- DT Journal
- LA
- AB
- English Sol. poly(organophosphazenes) bearing covalently bound Cu phthalocyanine side groups were synthesized. The synthesis pathway involved the prepn. of a high-mol.-wt. poly[bis(aryloxy)phosphazene] in which 90% of the side groups were phenoxy and 10% were odicyanoaryl units. Condensation of this species with a large excess of phthalonitrile, 1,2-dimethyl-4,5-dicyanobenzene [36360-43-7], 1,2dicyano-4,5-bis(phenoxymethyl)benzene, or 4,5bis[(methoxyethoxy)methyl]-1,2-dicyanobenzene in DMF and in the presence of CuBr yielded open-chain polymers with phthalocyanine side groups covalently linked to the phosphazene chain. On the basis of UV/visible spectral data, the polymeric phthalocyanines did not aggregate in a variety of solvents. The synthesis of small-mol., cyclic trimeric model analogs of these polymers was accomplished. The solubilities of these small-mol. cyclotriphosphazenyl phthalocyanines are much higher than those of the free phthalocvanines. The elec. conductivities of the iodine-doped trimeric and high-polymeric species, both as compressed pellets and as thin films, were in the range of 10-4 Ω -1 cm-1 for the cyclic trimers and 10-5-10-8 Ω -1 cm-1 for the high polymers.
- 101695-56-1P 101695-57-2P 101695-58-3P ΙT (prepn. of, as model for copper phthalocvanine-contg. poly(dichlorophosphazene))
- RN 101695-56-1 HCA CN
 - Copper, [2,2,4,4,6,6-hexahydro-2,2,4,4,6-pentaphenoxy-6-[4-[(29H,31Hphthalocyanin-2-yloxy)methyl]phenoxy]-1,3,5,2,4,6triazatriphosphorinato(2-)-N29,N30,N31,N32]-, (SP-4-2)- (9CI) (CA INDEX NAME)

RN 101695-57-2 HCA
CN Copper, [2-[4-[[[9,10,16,17,23,24-hexakis(phenoxymethyl)-29H,31H-phthalocyanin-2-yl]oxy]methyl]phenoxy]-2,2,4,4,6,6-hexahydro-2,4,4,6,6-pentaphenoxy-1,3,5,2,4,6-triazatriphosphorinato(2-)-N29,N30,N31,N32]-, (SP-4-2)- (9CI) (CA INDEX NAME)

$$\frac{\text{OPh}}{\text{OPh}}$$

RN 101695-58-3 HCA
CN Copper, [2-[4-[[[9,10,16,17,23,24-hexakis[(2-methoxyethoxy)methyl]29H,31H-phthalocyanin-2-yl]oxy]methyl]phenoxy]-2,2,4,4,6,6-hexahydro2,4,4,6,6-pentaphenoxy-1,3,5,2,4,6-triazatriphosphorinato(2-)N29,N30,N31,N32]-, (SP-4-2)- (9CI) (CA INDEX NAME)

---- OMe

IT 101695-54-9P

(prepn. of, as model for copper phthalocyanine-contg. polyphosphazenes)

RN 101695-54-9 HCA

CN Copper, [2-[4-[[(9,10,16,17,23,24-hexamethyl-29H,31H-phthalocyanin-2-yl)oxy]methyl]phenoxy]-2,2,4,4,6,6-hexahydro-2,4,4,6,6-pentaphenoxy-1,3,5,2,4,6-triazatriphosphorinato(2-)-N29,N30,N31,N32]-, (SP-4-2)-(9CI) (CA INDEX NAME)

```
ΙT
    101695-56-1P 101695-57-2P 101695-58-3P
        (prepn. of, as model for copper phthalocyanine-contq.
        poly(dichlorophosphazene))
ΙT
    101695-54-99
        (prepn. of, as model for copper phthalocyanine-contq.
        polyphosphazenes)
L25
    ANSWER 9 OF 9 HCA COPYRIGHT 2009 ACS on STN
     63:17298 HCA Full-text
AN
OREF 63:3083q-h,3084a-c
    Water-soluble dves containing halopyrimidyloxymethyl groups
TΙ
     Ischer, Hans; Siegrist, Hans
IN
PA
    Sandoz Ltd.
SO
    20 pp.
DТ
    Patent.
LA
    Unavailable
FAN.CNT 1
    PATENT NO.
                       KIND
                                          APPLICATION NO.
                                                                  DATE
                             DATE
     _____
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                                           -----
PΙ
    GB 990974
                               19650505
                                          GB 1961-17477
                                                                  196105
                                                                  12
                                                <--
    DE 1218636
                                           DF.
PRAI CH
                               19600513 <--
GT
    For diagram(s), see printed CA Issue.
     Water-sol. pyrimidine dyes of the general formula I, where Y is N:N,
AB
     SO2NH, CONH, or NH, O is the radical of a water-sol, dve, Z is
     chloro- or dichloropyrimidinyl, and X is Me or Cl, were synthesized
     and dyed cotton and wool fibers with good fastness. For example,
     18.3 parts 2,4,6-trichloropyrimidine (II) in 22 parts PhMe was added
     dropwise to 12.3 parts 3-H2NC6H4CH2OH (III) in 150 parts H2O and 42
     parts 30% NaOH at 2°. Stirring was continued at 0-3° for 10-15 hrs.,
     then 35.5 parts 30% HCl was added. The resulting ppt. of 3-amino-1-
     (dichloropyrimidyloxymethyl)benzene (IV) was dried in vacuo at 35-40°
     and 13.5 parts was diazotized and coupled with 16.2 parts 1-(2',5'-
     dichlorophenyl)-3-methyl-5-pyrazolone-4'- sulfonic acid (V). After
     coupling, the pH was made acid with HCl and the resulting dye (VI), a
     yellow, water-sol. powder, was filtered. It dyed wool, silk, and
     cellulosic fibers greenish vellow shades with good fastness. VI was
     also prepd. by coupling diazotized III with V and then condensing the
     resulting dve with II. Similarly, other azo dves (VII, Z =
     dichloropyrimidyl) were prepd. (RH, X, Y, and shade on cotton or wool
     given): 1,8,3,6-BzNH(HO)C10H4(SO3H)2, H, H, red; 1,3,6-
```

HOC10H5(SO3Na)2, H, H, orange-red; 1,4,6-HOC10H5(SO3Na)2(VIII), H, H, scarlet (a similar dye was prepd. using 2,4-dichloropyrimidine in place of II); VIII, H, Me, scarlet; VIII, Cl, H; red; 2,6,8-HOC10H5(SO3H)2, Me, H, orange. A turquoise dye was obtained by condensing Cu phthalocyaninetetrasulfonyl chloride with 1 mole IV at 20-75°, pH 5-5.5 and sapong. the remaining sulfonyl chloride groups. 1-Amino-4-(2,4,6-trimethylanilino)anthraquinone-2-sulfonic acid was treated with SO2Cl2 in ClSO3H at 50-5° and the product condensed with IV, yielding a brilliant blue dye, 2,4,8-H2NC10H5(SO3H)2 \rightarrow 2,6-HOC10H6SO2NHC6H4CH2OH-3 (IX) was condensed with II, vielding a red dve. Also, III was condensed with 4-AcNHC6H4SO2Cl and the product deacetylated to give 4-H2NC6H4SO2NHC6H4CH2OH-3 which was diazotized and coupled with 1,3,6,8-HOC10H4(SO3Na)3 and then condensed with II, yielding a red dye. 4,3-C1(H2N)C6H3CH2OH was prepd. by treating o-C1C6H4NO2 with (C1CH2)20, hydrolyzing the 4,3-C1(O2N)C6H3CH2OMe to 4,3-Cl(O2N)C6H3CH2OH and reducing the nitro group. 3- and 4-H2NC6H4CONHC6H4CH2OH were prepd. by acylating III with 3- or 4-O2NC6H4COCl and reducing. IX was prepd. by treating 2,6-PhSO3C10H6SO3Na with POC13 at 100-20°, condensing the sulfonyl chloride with III and sapong, the benzenesulfonate group, 31277-81-3P, Copper, [trihydrogen $[[\alpha-[(dichloropyrimidinyl)oxy]-m-$

ΙT

tolvllsulfamovllphthalocvaninetrisulfonato(2-)1-(prepn. of)

RN 31277-81-3 HCA

Cuprate(3-), [C-[[[3-CN

> [[(dichloropyrimidiny1)oxy]methyl]phenyl]amino]sulfonyl]-29H,31Hphthalocyanine-C, C-disulfonato (5-)-N29, N30, N31, N32]-, trihydrogen (9CI) (CA INDEX NAME)

> > PAGE 1-A

2 (D1-C1)

IT 31277-81-3P, Copper, [trihydrogen $[[\alpha-[(dichloropyrimidinyl)oxy]-m-tolyl]sulfamoyl]phthalocyaninetrisulfonato(2-)]-(prepn. of)$

(FORMULA 3)

=> D L40 1-7 BIB ABS HITSTR HITIND RE

L40 ANSWER 1 OF 7 HCA COPYRIGHT 2009 ACS on STN

AN 141:44857 HCA Full-text

TI Photosensitive resin composition comprising halogen-free colorant

IN Oka, Hidetaka; Adam, Jean-Marie

PA Ciba Specialty Chemicals Holding Inc., Switz.

SO PCT Int. Appl., 21 pp.

CODEN: PIXXD2

DT Patent

LA English

	CNT	

FAN.	FAN.CNT 1 PATENT NO.			KIND DATE				APPL	ICAT	ION	NO.		DATE				
ΡI		WO 2004049070		A2 20040610				WO 2		EP50	849		200311 19				
	wo	2004	0/10/0	70		7.3		2004	0722			<					
	WO	W:	AE, CH, GB, KR, MX, SG,	AG, CN, GD, KZ, MZ, SK,	AL, CO, GE, LC, NI, SL,	AM, CR, GH, LK, NO, SY,	AT, CU, GM, LR, NZ,	AU, CZ, HR, LS, OM,	AZ, DE, HU, LT, PG,	BA, DK, ID, LU, PH,	DM, IL, LV, PL,	DZ, IN, MA, PT,	EC, IS, MD, RO,	EE, JP, MG, RU,	EG, KE, MK, SC,	ES, KG, MN, SD,	FI, KP, MW, SE,
		RW:	BW, AZ, DK, SE,	GH, BY, EE, SI,	KG, ES,	KE, KZ, FI, TR,	LS, MD, FR, BF,	MW, RU, GB, BJ,	TJ, GR,	TM, HU,	AT, IE,	BE, IT,	BG, LU,	CH, MC,	CY,	CZ, PT,	DE, RO,
	CA	2507						2004	0610		CA 2	003-	2507	471		2	00311 9
	AU	2003	2982	93		A1		2004	0618		AU 2	< 003-		93		2	00311 9
	EP	1565	789			A2		2005	0824		EP 2			25		2	00311 9
		R:						ES, FI,									
	BR	2003		57		A		2005	1018		BR 2			7		2	00311 9
	CN	1717	627			A		2006	0104		CN 2		8010	4325			00311 9
	JP	2006	5083	81		Т		2006	0309		JP 2	< 004-		39		2	00311 9

				<	
	US 20050282923	A1	20051222	US 2005-535373	
					200505
					19
				<	
	MX 2005005682	A	20050726	MX 2005-5682	
					200505
					27
				<	
	IN 2005CN01406	A	20070803	IN 2005-CN1406	
					200506
					24
				<	
PRAI	EP 2002-406035	A	20021128	<	
	WO 2003-EP50849	W	20031119		
os	MARPAT 141:44857		Doodaaa		
CT	111.44007				

Ι

AB The present invention relates to a photosensitive resin compn. for solder resists comprising as a component (A) a green colorant of the formula I (rings A, B, C and D are substituted by hydroxy or by moiety; R, R2 = H, C1-4-alkyl; n = 0-3; ring E = unsubstituted or

substituted by C1-6-alkyl, C1-6-alkoxy, hydroxy, NHCOR3, NHSO2, R4 or SO2NHR5; R3, R4, R5 = C1-4-alkyl; Ph); as a component (B) an alkali sol. oligomer or polymer reactive or unreactive; as a component (C) a polymerizable monomer; as a component (D) a photoinitiator; as a component (F) an epoxy compd.; and also, if desired, as a component (F) further additives. The photosensitive compn. can be used as solder resist, etching resist or plating resist in the manuf. of printed circuit boards. The inventive solder resist comprising a single green pigment that maintains qualities required as a green coloring material, such as clear hue, good weather— and heat resistance and that is satisfactory at the same time in the points of environmental pollution, has not been found yet in the present state of the art.

TT 20468-22-8 21707-33-5 29696-46-6

(photosensitive resin compn. comprising halogen-free colorant)

RN 20468-22-8 HCA

CN Copper, [29H, 31H-phthalocyanine-1,8,15,22-tetrolato(2-)-KN29,KN30,KN31,KN32]-, (SP-4-1)- (9CI) (CA INDEX NAME)

PAGE 1-A

RN 21707-33-5 HCA

CN Copper, [29H,31H-phthalocyanine-2,9,16,23-tetrolato(2-)KN29,KN30,KN31,KN32]-, (SP-4-1)- (9CI) (CA
INDEX NAME)

RN 29696-46-6 HCA

CN Copper, [29H,31H-phthalocyanine-C,C,C,C-tetrolato(2-)kN29,kN30,kN31,kN32]- (9CI) (CA INDEX NAME)

PAGE 2-A

4 (D1-OH)

- IC ICM G03F007-027
- ${\tt CC} 74-5$ (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
- ST photoresist solder resist printed circuit board compn photosensitive resin
- IT Solder resists

(photosensitive resin compn. comprising halogen-free colorant)

IT 5495-84-1, Quantacure ITX **20468-22-8 21707-33-5** 29570-58-9, DPHA **29696-46-6** 71868-10-5, Irgacure 907 155575-69-2, GY 1180 227101-11-3 290821-67-9 667865-45-4

671791-90-5, EA-6340

(photosensitive resin compn. comprising halogen-free colorant)

RE

- (1) Anon: US 20020136986 A1
- (2) Anon; US 5009982 A HCA
- (3) Anon; US 5789137 A HCA
- ANSWER 2 OF 7 HCA COPYRIGHT 2009 ACS on STN 1.40
- 137:312357 HCA Full-text AN
- Manufacture of sulfonyloxylated phthalocyanine compounds with good TΙ solvent solubility and light sensitivity
- Oishi, Takao; Yashiro, Toru; Taniquchi, Masatoshi; Narizuka, IN Toshiro; Aoi, Hironao
- PA Ricoh Co., Ltd., Japan; Yamada Chemical Co., Ltd.
- SO Jpn. Kokai Tokkvo Koho, 13 pp.

CODEN: JKXXAF

DT Patent

LA FAN.	Japanese CNT 1				
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	JP 2002309119	A	20021023	JP 2001-118841	200104

17

PRAI JP 2001-118841

20010417 <--

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MARPAT 137:312357 OS

- The title compds. useful for optical recording such as CD-R AB application, are obtained from specific metal phthalocvanine compds. bearing arenesulfonyloxylated groups on the arom. rings. Thus, adding 0.41 g a 60% oil suspension of NaH 0.41 to a mixt. of 0.75 g α, α, α -tetrahydroxyvanadyl phthalocyanine and 10 mL dry THF, mixing for 10 min at 40°, adding 2.52 g 4-(trifluoromethyl)benzenesulfonyl chloride and mixing at 50-55° for 120 h gave a pigment.
- ΙT 20468-22-8P

(intermediate; manuf. of sulfonvloxvlated phthalocvanine compds. with good solvent soly. and light sensitivity

- RN 20468-22-8 HCA
- CN Copper, [29H, 31H-phthalocyanine-1, 8, 15, 22-tetrolato(2-)κN29,κN30,κN31,κN32]-, (SP-4-1)- (9CI) (CA INDEX NAME)

IC ICM C09B047-24

ICS B41M005-26; C07D487-22; G11B007-24

CC 41-7 (Dyes, Organic Pigments, Fluorescent Brighteners, and Photographic Sensitizers) Section cross-reference(s): 76

IT Optical ROM disks

(manuf. of sulfonyloxylated phthalocyanine compds. with good solvent soly. and light sensitivity)

IT Transition metal complexes

(phthalocyanine, arenesulfonyloxylated compds.; manuf. of sulfonyloxylated phthalocyanine compds. with good solvent soly. and light sensitivity)

IT Metallophthalocyanines

(transition metal complexes, arenesulfonyloxylated compds.;

manuf. of sulfonyloxylated phthalocyanine compds. with good solvent soly. and light sensitivity)

IT 19056-23-6P, 3-Methoxyphthalonitrile 20468-22-8P

80345-84-2P 158621-02-4P 160988-54-5P 473254-09-0P 473254-10-3P

(intermediate; manuf. of sulfonyloxylated phthalocyanine compds. with good solvent soly. and light sensitivity

IT 473253-97-3P 473253-98-4P 473254-00-1P 473254-01-2P 473254-02-3P 473254-03-4P 473254-04-5P 473254-05-6P

473254-06-7P 473254-07-8P 473254-08-9P

(manuf. of sulfonyloxylated phthalocyanine compds. with good solvent soly. and light sensitivity)

IT 67-56-1, Methanol, reactions 98-09-9, Benzenesulfonyl chloride 98-59-9, p-Toluenesulfonyl chloride 98-60-2,

4-Chlorobenzenesulfonyl chloride 773-64-8,

2,4,6-Trimethylbenzenesulfonyl chloride 2991-42-6,

4-(Trifluoromethyl)benzenesulfonyl chloride 6553-96-4,

2,4,6-Triisopropylbenzenesulfonyl chloride 7447-39-4, Copper chloride, reactions 7646-85-7, Zinc chloride, reactions

7718-98-1, Vanadium trichloride 15084-51-2.

4-tert-Butylbenzenesulfonyl chloride 51762-67-5,

 $3-Nitrophthalonitrile \\ 244763-85-7 \\ 473254-11-4$

(manuf. of sulfonyloxylated phthalocyanine compds. with good solvent soly. and light sensitivity)

- L40 ANSWER 3 OF 7 HCA COPYRIGHT 2009 ACS on STN
- AN 133:244985 HCA Full-text
- TI Molecular orientation-photoconductivity relationship study of phthalocyanine polymer-oriented thin films
- AU Chen, Hong-Zheng; Wang, Mang; Yang, Shi-Lin
- CS Department of Polymer Science and Engineering, Zhejiang University, Hangzhou, 310027, Peop. Rep. China
- SO Journal of Applied Polymer Science (2000), 77(11), 2331-2339
 - CODEN: JAPNAB; ISSN: 0021-8995
- PB John Wiley & Sons, Inc.
- DT Journal LA English
- Biggins

 The mol. orientation-photocond. relationships of several kinds of phthalocyanine polymer (PPc)-oriented thin films have been studied in double-layered photoreceptor devices, where the charge-generation layers (CGLs) are phthalocyanine polymer-oriented thin films and the charge-transportation layers (CTLs) are composed of hole transporting materials of tetra-Ph benzidine or hydrazone. The oriented thin films contg. PPc dispersed in polyvinyl difluoride (PVDF) were prepd. by the elec. field orientation. The results showed that the

photosensitivities of the phthalocyanine polymer (PPcs)-oriented thin films were higher than those of the unoriented PPcs thin films, and varied with their mol. structures and the mol. stacking in the films. This was thought to be due to the mol. orientation effect, which was demonstrated by the analyses of the polarized fluorescence, DSC, FTIR reflection absorption spectroscopy (FTIR-RAS), and angle-dependent XPS.

IT 292832-89-4P 292832-90-7P

(mol. orientation-photocond. relationship study of phthalocyanine polyvinyl difluoride polymer-oriented thin films)

RN 292832-89-4 HCA

CN Copper, [15-(9-ethenyl-9H-carbazolyl)-8,22-dinitro-29H,31H-phthalocyanin-9-olato(2-)-

κN29,κN30,κN31,κN32]-, polymer with acetonitrile (9CI) (CA INDEX NAME)

CM 1

CRN 176050-69-4 CMF C46 H23 Cu N11 05 CCI CCS, IDS

PAGE 1-A

PAGE 2-A

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CM 2
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CRN 75-05-8 CMF C2 H3 N

H3C-C=N

RN 292832-90-7 HCA
CN Copper, [15-(9-ethenyl-9H-carbazolyl)-8,22-dinitro-29H,31H-phthalocyanin-9-olato(2-)KN29, kN30, kN31, kN32]-, polymer with
4-ethenylpyridine (9CI) (CA INDEX NAME)

CM

1

CRN 176050-69-4 CMF C46 H23 Cu N11 O5 CCI CCS, IDS

PAGE 1-A



CM 2

CRN 100-43-6 CMF C7 H7 N



CC 74-3 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

Section cross-reference(s): 76

IT 9003-05-8DP, reaction products with copper dinitrophthalocyaninediazonium salt 25067-59-8P, Polyvinylcarbazole 65670-15-7DP, reaction products with diazotized copper diaminodinitrophthalocyanine 146166-28-1DP, diazotized, reaction products with polyacrylamide and poly(acrylamide-vinylcarbazole) 292832-89-4P 292832-90-7P

(mol. orientation-photocond. relationship study of phthalocyanine polyvinyl difluoride polymer-oriented thin films)

RE

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- (2) Anon; Jpn Kokai Tokkyl Koho JP 60,201,345
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- (31) Singer, K; J Opt Soc Am 1987, VB4, P968
- (32) Wang, M; J Photochem Photobiol 1995, V88, P183 HCA
- (33) Whitesell, J; Mol Cryst Liq Cryst 1994, V240, P251 HCA
- (34) Wieringa, R; Macromolecules 1996, V29, P3032 HCA
- (35) William, C; J Am Chem Soc 1959, V81, P4795
- (36) Wohrle, D; Makromol Chem 1980, V181, P2127
- (37) Wohrle, D; Polym Bull 1986, V15, P193
- (38) Xue, G; Appl Spectrose 1987, V41, P264 HCA
- L40 ANSWER 4 OF 7 HCA COPYRIGHT 2009 ACS on STN
- AN 126:265228 HCA Full-text
- OREF 126:51347a
- TI Aqueous dye-terminated urethane- or acrylic polymeric pigment-dispersing agent for aqueous printing inks or paints, and pigment dispersion composition therefrom
- IN Tadashi, Itabashi; Takashi, Kamikubo; Katsuhiko, Sawamura
- PA Toyo Ink Manufacturing Co., Ltd., Japan
- SO Eur. Pat. Appl., 30 pp.

CODEN: EPXXDW

DT Patent LA English

LA English FAN.CNT 1						
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE 	
PI	EP 763580	A2	19970319	EP 1996-114489	199609 10	
				<	10	
	EP 763580 EP 763580 R: DE, GB	A3 B1	20010228 20030813			
	JP 09077986	A	19970325	JP 1995-232167	199509 11	
	JP 09077988	Д	19970325	< JP 1995-232169		
	01 03077300		19970020	01 1990 202109	199509 11	
	JP 3397014	В2	20030414	<		
	JP 09077991	A		JP 1995-238162	199509 18	
				<		
	JP 3397017 JP 09077993	B2 A	20030414 19970325	JP 1995-238164	199509 18	
	JP 09077995	,	10070305	<		
	JE 09077995	A	19970325	JP 1995-238167	199509 18	
	JP 09077985	A	19970325	< JP 1995-238168	199509	
	JP 09077996	A	19970325	< JP 1995-238169	18	
				<	199509 18	
	US 5854323	A	19981229	us 1996-712452	199609 11	

PRAI JP 1995-232167 Α 19950911 <--JP 1995-232169 19950911 JP 1995-238162 Α 19950918 <--JP 1995-238164 Δ 19950918 <--JP 1995-238167 Д 19950918 <--JP 1995-238168 19950918 <--А JP 1995-238169 19950918 <--А

AB Aq. pigment-dispersion compn. for inks or paints, having improved dispersibility of pigment and adaptability, comprises a pigment-dispersing agent contg. an aq. linear urethane or acrylic polymer terminated with an org. dye, anthraquinone or acridone, a pigment and, optionally, an aq. resin. Thus, phthalocyanine-terminated polyurethane pigment dispersing agent (prepd. from dimethylolpropionic acid, polypropylene glycol, isophorone diisocyanate, isophorone diamine and copper phthalocyanine carboxylic acid) 1, pigment 5, water sol. acrylic resin (acrylic acid-2-hydroxyethyl methacrylate-Et methacrylate-Me methacrylate-vinyl acetate copolymer) 13 and melamine resin (Cymel 303) 6 parts, were blended to give a paint which was applied onto a PBT film and baked at 140° for 30 min showing gloss (20° angel) 77.5%, compared to 34.0 for a sample without pigment dispersing agent.

IT 55946-69-5DP, reaction product with isocyanate-terminated urethane polymer

(pigment-dispersing agent; aq. dye-terminated urethane- or acrylic polymeric pigment-dispersing agent for aq. printing inks or paints)

RN 55946-69-5 HCA

CN

Copper, [29H,31H-phthalocyaninolato(2-)-KN29,KN30,KN31,KN32]- (9CI) (CA INDEX NAME)

D1-OH

```
42-5 (Coatings, Inks, and Related Products)
ΤТ
    84-65-1DP, Anthraquinone, derivs., reaction product with
     amine-terminated urethane or acrylic polymer 117-78-2DP,
     2-Anthraguinone carboxylic acid, reaction product with
     amine-terminated urethane polymer 117-79-3DP,
     2-Amino-anthraquinone, reaction product with NCO-terminated urethane
     polymer 147-14-8DP, derivs., reaction product with amine- or
     OH-terminated urethane or amine-terminated acrylic polymer
     1047-16-1DP, Quinacridone, derivs., reaction product with
     amine-terminated urethane or acrylic polymer
                                                  2381-23-9DP,
     2-Anthraguinonesulfonvl chloride, reaction product with
     amine-terminated urethane or acrylic polymer 6470-87-7DP,
     2-Anthraguinonecarbonyl chloride, reaction product with
     amine-terminated urethane or acrylic polymer 27918-14-5DP.
     2-Amino-acridone, reaction product with NCO-terminated urethane
     polymer 55946-69-5DP, reaction product with
     isocyanate-terminated urethane polymer 59617-74-2DP, reaction
     product with isocvanate-terminated urethane polymer 67952-88-9DP.
     Dimethylolpropionic acid-isophorone diisocyanate-polypropylene
     glycol copolymer, terminated with org. dye, anthraquinone or
     acridone 188679-52-9DP, reaction product with diazotized urethane
              188679-53-0DP, reaction product with amine-terminated
     polymer
     urethane or acrylic polymer 188679-54-1DP, terminated with org.
     dye, anthraquinone or acridone 188738-62-7DP, reaction product
     with amine-terminated urethane polymer 188738-63-8DP, reaction
    product with amine-terminated urethane polymer 188738-64-9DP,
     reaction product with amine-terminated acrylic polymer
        (pigment-dispersing agent; aq. dye-terminated urethane- or
        acrylic polymeric pigment-dispersing agent for ag. printing inks
        or paints)
L40 ANSWER 5 OF 7 HCA COPYRIGHT 2009 ACS on STN
AN
    124:179010 HCA Full-text
OREF 124:33157a,33160a
TΙ
   Coated pigments, their manufacture, and colorant
    compositions containing them
IN
    Ide, Yuusaku
PA
    Toyo Ink Manufacturing Co., Ltd., Japan
SO
    Eur. Pat. Appl., 19 pp.
    CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1
                                      APPLICATION NO.
    PATENT NO.
                       KIND DATE
                                                                 DATE
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IC

CC

ICM C09D017-00 ICS C09B067-00

PI	EP 677556	A2	19951018	EP 1995-302439	199504
					12
				<	
	EP 677556	A3	19970226		
	R: DE, FR, GB				
	JP 07331101	A	19951219	JP 1995-89118	
					199504
					14
				<	
	JP 3740706	B2	20060201		
	US 5795376	A	19980818	US 1997-924650	
					199709
					05
				<	

PRAI JP 1994-76922 Д 19940415 <--US 1995-421319 В1 19950413 <--

AB A coated pigment can be prepd. by: (a) prepg. a mixt. of water and a substantially water-insol. org. surface modifier; (b) introducing the mixt., under pressure, into a conduit having a diam.-decreased portion and a turning portion, providing accelerated flow through the diam .- decreased portion and mutual collision of the accelerated mixt. or collision of the accelerated mixt. against a wall of the conduit, thereby obtaining a homogeneous ag. dispersion of the surface modifier in water; (c) mixing the ag. dispersion with a pigment, thereby providing a pigment coated with the surface modifier; and (d) isolating the coated pigment. The coated pigments are useful in coatings, inks, and plastics. Thus, a 1:3 rosin-propylene oxide adduct was dispersed in water by passing their mixt. for 3 cycles through a Nanomizer at 80° and 1000 kg/cm2, and 10 parts of the resulting dispersion was mixed with 100 parts (solids) Cu phthalocyanine dispersion to give a coated pigment easily dispersible to form an offset ink with av. particle size $<5 \ \mu m$.

ΙT 175447-79-7

(pigment coatings by mech. dispersion of)

175447-79-7 HCA RN

CN Poly[oxy(methyl-1,2-ethanediyl)], α -hydro- ω -hydroxy-, ether with [N,N',N''-tris(2-hydroxyethyl)-N,N',N''-trimethyl-29H,31Hphthalocyanine-C, C, C-trisulfonamidato (2-)-N29, N30, N31, N32] copper (3:1) (9CI) (CA INDEX NAME)

PAGE 2-A

$$3 \begin{bmatrix} & & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ &$$

ICM C09B067-08 IC ICS C09C003-00; C09D017-00; B01F003-00

ICA C09D011-02

CC 42-6 (Coatings, Inks, and Related Products) Section cross-reference(s): 37

IΤ 57-11-4, Octadecanoic acid, uses 100-42-5D, Styrene, polymers with acrylic monomers 107-64-2, Dimethyldistearylammonium chloride 111-20-6, Decanedioic acid, uses 124-22-1, Laurylamine 301-02-0, Oleamide 9003-07-0, Polypropylene 9003-53-6 12698-87-2, Rosinamine D 25087-26-7, Poly(methacrylic acid) 25233-30-1, Polyaniline 27924-99-8, Poly(12-hydroxystearic acid) 42739-64-0 79621-12-8, Tamanol 361 86753-81-3, Solsperse 17000 93971-95-0 111213-92-4, AT (ester gum) 113834-89-2, Byk 160 127595-95-3 172259-63-1, 2-Naphthalenecarboxylic acid, 3-hydroxy-4-[(4-methyl-2-sulfophenyl)azol-, didodecyldimethylammonium salt (1:1) 172259-65-3 174205-17-5

175447-79-7 175447-80-0

(pigment coatings by mech. dispersion of)

L40 ANSWER 6 OF 7 HCA COPYRIGHT 2009 ACS on STN 121:46560 HCA Full-text AN

OREF 121:8235a,8238a

- TI Carrier composition for electrostatographic developer
- IN Hara, Takeshi; Arikawa, Akira; Ishikawa, Yoshibumi

PA Toyo Ink Mfg Co, Japan

SO Jpn. Kokai Tokkyo Koho, 5 pp.

CODEN: JKXXAF

- DT Patent
- LA Japanese

FAN CNT 1

T LILY	. 0111 1						
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
PI	JP 05257328	A	19931008	JP 1992-89531			
					199203		
					10		
					1.5		

JP 2903850

B2 19990614 19920313 <--

PRAI JP 1992-89531 AB The title car

The title carrier compn. comprises a magnetic material and a phthalocyanine deriv. Pc(ANR'(CH2CHR20)mH)n [Pc = phthalocyanine

residue; A = CH2, CO, SO2, CH2NHCOCH2; R'=H, lower alkyl, (CH2CHR2O)k; R2=H, Me; k, m=1-30, n=1-4] dispersed in a binder resin. This invention prevents carrier adhesion to the nonimage areas.

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- IT 156029-43-5
 - (dispersing agent, electrophotog. carrier from)
- RN 156029-43-5 HCA
- CN Poly[oxy(methyl-1,2-ethanediyl)], α-hydro-φ-hydroxy-,
 ether with [N,N,N',N'-tetrakis(2-hydroxymethylethyl)-29H,31Hphthalocyanine-C,C-disulfonamidato(2-)-N29,N30,N31,N32]copper (4:1)
 (9CI) (CA INDEX NAME)

4 (D1-Me)

PAGE 2-A

PAGE 2-B

IC ICM G03G009-107 ICS C09B067-50

 $\mbox{CC} - 74-3$ (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

IT 156029-43-5

(dispersing agent, electrophotog. carrier from)

L40 ANSWER 7 OF 7 HCA COPYRIGHT 2009 ACS on STN

AN 91:58852 HCA Full-text

OREF 91:9551a,9554a

TI Photocurable, colored coating compositions

IN Takezawa, Nobuo; Kawabata, Keizo; Abe, Yoshio; Hosoda, Toru; Yoshida, Akio; Saikatsu, Hiroaki; Kanno, Toshiyuki

PA Dainichiseika Color and Chemicals Mfg. Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 54026887	A	19790228	JP 1977-92204	

197708 02

JP 58023401 B 19830514

PRAI JP 1977-92204 A 19770802 <-AB The title compns. contained photocurable, film-forming polymers with functional groups and org. colorants with reactive groups. For example, a compn. from glycidyl acrylate-Me methacrylate copolymer acrylate [65608-20-0] 70, trimethylolpropane triacrylate 30, 1,6-hexanediol diacrylate 10, 1:3 Cu tris(chloromethyl)phthalocyanine-N-methylpropanediamine reaction product 2, and benzoin Et ether 2 parts was coated on Al to 30 μ-thick and irradiated with a high-pressure UV lamp (80 W/cm) for 10 s to give a coating with better adhesion, solvent resistance, flexibility, and hardness than that using Cu phthalocyanine.

<--

IT 70848-98-5

(photoreactive dyes, for photocurable coatings for aluminum)

RN 70848-98-5 HCA

CN Copper, [C-chloro-C,C-dimethyl-29H,31H-phthalocyanine-C,C-diolato(2-)-N29,N30,N31,N32]- (9CI) (CA INDEX NAME)

D1-C1

2 (D1-OH)

PAGE 2-A

2 (D1-Me)

```
C08F020-34; C08F002-44; C07F002-48; C08F020-32
IC
CC
     42-10 (Coatings, Inks, and Related Products)
IΤ
    Tung oil
        (coatings contg., contg. reactive dyes, photocurable,
        for aluminum)
    Urethane polymers, uses and miscellaneous
TΤ
        (coatings, photocurable, colored)
TΤ
    Coloring
        (of photocurable coatings, with reactive dyes, for
        aluminum)
ΤТ
    Coating materials
        (photocurable, colored, epoxy resins and
        polyurethanes and polyesters, for aluminum)
ΙT
     7429-90-5, uses and miscellaneous
        (coatings for, photocured, colored)
     106-91-2D, reaction products with eleostearic acid and TDI
ΙT
     13296-76-9D, reaction products with glycidyl methacrylate and TDI
```

(coatings, contg. tung oil, photocurable, contg.

3524-68-3D, reaction products with TDI, polymer with

reactive dyes, for aluminum)

IΤ

styrene 26471-62-5D, reaction products with pentaerythritol triacrylate, polymer with styrene 37341-86-9 50658-60-1 61970-25-0 65608-20-0

(coatings, photocurable, contg. reactive dyes, for aluminum)

- IT 81-78-7 124-09-4D, reaction products with dye chloromethyl derivs. 124-30-1D, reaction products with dye chloromethyl derivs.
 - 141-43-5D, reaction products with dye chloromethyl derivs.
 - $\begin{array}{lll} 4471-41-4 & 6291-84-5D\text{, reaction products with dye chloromethyl} \\ \text{derivs.} & 27121-79-5D\text{, reaction products with amines} & 70848-62-3D\text{,} \\ \end{array}$

reaction products with amines 70848-98-5 70858-16-1D, reaction products with amines 70858-17-2D, reaction products with amines

(photoreactive dyes, for photocurable coatings for aluminum)

- => D L42 1-33 TI
- L42 ANSWER 1 OF 33 HCA COPYRIGHT 2009 ACS on STN
- TI Phthalocyanine dyes, their production and their use in jet-printing inks
- L42 ANSWER 2 OF 33 HCA COPYRIGHT 2009 ACS on STN
- ${\tt TI} \quad {\tt Color} \ {\tt ink} \ {\tt sets} \ {\tt for} \ {\tt ink-jet} \ {\tt printing} \ {\tt with} \ {\tt good} \ {\tt light} \ {\tt fastness} \ {\tt and} \ {\tt high} \ {\tt resolution}$
- L42 ANSWER 3 OF 33 HCA COPYRIGHT 2009 ACS on STN
- TI Thermal degradation kinetics of metal(II) 1,8,15,22-tetranitro and tetrahydroxy phthalocyanines
- L42 ANSWER 4 OF 33 HCA COPYRIGHT 2009 ACS on STN
- TI Synthesis and properties of hydroxy-and-nitro-substituted phthalocyanine complexes
- L42 ANSWER 5 OF 33 HCA COPYRIGHT 2009 ACS on STN
- TI New "molecular metals" based on symmetrically tetrasubstituted copper phthalocyanine complexes
- L42 ANSWER 6 OF 33 HCA COPYRIGHT 2009 ACS on STN
- ${\tt TI} \quad {\tt Application of diazotization reaction for synthesis of substituted phthalocyanines}$
- L42 ANSWER 7 OF 33 HCA COPYRIGHT 2009 ACS on STN
- TI Synthesis and structural studies on 1,8,15,22-tetrahydroxyphthalocyanines of Co(II), Ni(II), Cu(II) and Zn(II)

- L42 ANSWER 8 OF 33 HCA COPYRIGHT 2009 ACS on STN
- TI Automotive coatings with good pigment dispersibility
- L42 ANSWER 9 OF 33 HCA COPYRIGHT 2009 ACS on STN
- TI Synthesis and photoconductivity study of VKCuPc monomer and its homopolymer
- L42 ANSWER 10 OF 33 HCA COPYRIGHT 2009 ACS on STN
- TI Substituted phthalocyanines and optical recording media containing them
- L42 ANSWER 11 OF 33 HCA COPYRIGHT 2009 ACS on STN
- TI Urbach tail in optical absorption for Langmuir-Blodgett films of amphiphilic phthalocyanine molecules
- L42 ANSWER 12 OF 33 HCA COPYRIGHT 2009 ACS on STN
- TI Toners for electrostatic image development containing phthalocynine amine derivative
- L42 ANSWER 13 OF 33 HCA COPYRIGHT 2009 ACS on STN
- TI A polymer with the mesomorphic order of liquid crystalline phthalocyanines
- L42 ANSWER 14 OF 33 HCA COPYRIGHT 2009 ACS on STN
- TI Effect of modifying additives on the surface energy of copper phthalocyanine
- L42 ANSWER 15 OF 33 HCA COPYRIGHT 2009 ACS on STN
- ${\tt TI}$ $\,$ ${\tt Effect}$ of the modification of a copper phthalocyanine surface on its adsorption properties
- L42 ANSWER 16 OF 33 HCA COPYRIGHT 2009 ACS on STN
- TI Phthalocyanine derivatives
- L42 ANSWER 17 OF 33 HCA COPYRIGHT 2009 ACS on STN
- TI Hydroxypolyphthalocyanines, new semiconductors with interesting properties
- L42 ANSWER 18 OF 33 HCA COPYRIGHT 2009 ACS on STN
- TI Solvent-stable copper phthalocyanines
- L42 ANSWER 19 OF 33 HCA COPYRIGHT 2009 ACS on STN
- TI Dark conductivity of some phthalocyanines
- L42 ANSWER 20 OF 33 HCA COPYRIGHT 2009 ACS on STN
- TI Cumene oxidation in presence of cupric octahydroxyphthalocyanine and

its derivatives

- L42 ANSWER 21 OF 33 HCA COPYRIGHT 2009 ACS on STN
- TI Water-soluble fiber-reactive dyes
- L42 ANSWER 22 OF 33 HCA COPYRIGHT 2009 ACS on STN
- TI Synthesis and properties of nitro, amino and hydroxy derivatives of metal phthalocyanines from ω -chlorosubstituted 1,2-dimethylbenzene containing a nitro group in a nucleus
- L42 ANSWER 23 OF 33 HCA COPYRIGHT 2009 ACS on STN
- TI Synthesis and study of the electrical properties of metallic complexes of octahydroxyanthraquinonecyanine
- L42 ANSWER 24 OF 33 HCA COPYRIGHT 2009 ACS on STN
- TI Preparation of highly metallized salts of oxy derivatives of copper phthalocyanine
- L42 ANSWER 25 OF 33 HCA COPYRIGHT 2009 ACS on STN
- TI Substituted phthalocyanine dye developers
- L42 ANSWER 26 OF 33 HCA COPYRIGHT 2009 ACS on STN
- TI Naphthalene derivatives. V. Synthesis of 2,3-naphthalocyanine
- L42 ANSWER 27 OF 33 HCA COPYRIGHT 2009 ACS on STN
- TI Synthesis and properties of hydroxy derivatives of copper phthalocyanine
- L42 ANSWER 28 OF 33 HCA COPYRIGHT 2009 ACS on STN
- TI Preparation of metal complexes of anthraquinone derivatives
- L42 ANSWER 29 OF 33 HCA COPYRIGHT 2009 ACS on STN
- TI Preparation of the tetrahydroxyacetic acid deriv. of copper phthalocyanine
- L42 ANSWER 30 OF 33 HCA COPYRIGHT 2009 ACS on STN
- TI Copper complex of tetrahydroxyphthalocyanine
- L42 ANSWER 31 OF 33 HCA COPYRIGHT 2009 ACS on STN
- TI 2.5-Bis[2-(5-phenyloxazolyl)]furan
- L42 ANSWER 32 OF 33 HCA COPYRIGHT 2009 ACS on STN
- TI Phthalocyanine dyes
- L42 ANSWER 33 OF 33 HCA COPYRIGHT 2009 ACS on STN
- TI Water-soluble phthalocyanine dyes

=> D L42 8.10 BIB ABS HITSTR HITRN RE

L42 ANSWER 8 OF 33 HCA COPYRIGHT 2009 ACS on STN

AN 127:19682 HCA Full-text

OREF 127:3917a,3920a

TI Automotive coatings with good pigment dispersibility

IN Itabashi, Masashi; Kamikubo, Takashi; Sawamura, Katsuhiko

PA Toyo Ink Mfg. Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 6 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

EAN CMT 1

FAN	.CNT	1
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	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE	
ΡI	JP 09078011	A	19970325	JP 1995-238166	199509	

PRAI JP 1995-238166

19950918 <--

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AB The coatings contain nonaq. coating varnishes and compns. contg. 100 parts pigments and 0.5-100 parts anthraquinone derivs., acridone derivs., or Q(XNR1YR2)n (I; Q = org. colorant residue, anthraquinone residue, acridone residue; X = SO2, CO, CH2, CH2NHCOCH2; R1 = H, alkyl, YR2; R2 = H, C1-4 lower alkyl; Y = propylene oxide polymer or ethylene oxide-propylene oxide copolymer with av. mol. wt. 400-10,000; n = 1-3). Thus, Cu chloromethylphthalocyanine 150, a N,N-bis(polyoxypropylene)amine 468, and MeOH 2000 parts were mixed at 65° and filtrated under reduced pressure to give a paste contg. 504 parts I. A coating comprising Phthalkyd 133-60 30, U-Van 20SE60 10, C.I. Pigment Blue 15:1 10, I 14, and xylene 50 parts showed good fluidity. A steel plate, which was coated with a primer and sanded, was spray-coated with the coating and baked at 140° to give a test piece with 60° gloss 79.8%.

IT 189400-04-2

(automotive coatings contg. anthraquinone or acridone derivs. and showing good pigment dispersibility)

RN 189400-04-2 HCA

CN Poly[oxy(methyl-1,2-ethanediyl)], α -hydro- ω -hydroxy-, ether with [[[(29H,31H-phthalocyaninyl- KN29,KN30,KN31,KN32)methylenenitrilo]bis[methylethanolato]](2-)]copper (2:1) (9CI) (CA INDEX NAME)

PAGE 1-A

2 (D1-Me)

PAGE 2-B

IT 189400-04-2

(automotive coatings contg. anthraquinone or acridone derivs. and showing good pigment dispersibility)

- L42 ANSWER 10 OF 33 HCA COPYRIGHT 2009 ACS on STN
- AN 124:178875 HCA Full-text
- OREF 124:33141a
- ${\tt TI}$. Substituted phthalocyanines and optical recording media containing them

IN McKeown, Neil Bruce; Treacher, Kevin Edward; Clarkson, Guy James

PA Secretary of State for Defence, UK

PCT Int. Appl., 80 pp. SO

CODEN: PIXXD2

	En	tent glish 1																
				KIND DATE				APPLICATION NO.						DATE				
PI	WO	95263	81			A1	A1 19951005			WO	199	5-G	B64	7				
																		199503 23
												<						
		W:																
			AT, SE	BE,	CH,	DE,	DK,	, ES,	FR,	GB,	GF	R, I	Ε,	IT,	LU,	MC,	NL	, PT,
	EP	75197	7			A1		1997	0108		EΡ	199	5-9	123	34			
																		199503 23
												<						
	EP	75197																
								LI,										
	GB	23020	95			A		1997	0108		GB	199	6-1	.910	2			
																		199503 23
												<						
		23020						1998										
	JP	09511	001			T		1997	1104		JP	199	5-5	250	30			
																		199503 23
	US	57928	60			A		1998	0811		US	199	6-7	7004	05			
																		199609 25
												<						
PRAI	GB	1994-	5970)		A		1994	0325	<-								

OS

WO 1995-GB647 W 19950323 <--MARPAT 124:178875 AB Phthalocyanines MPc are described, where M is a (substituted) metal atom or Si, or 2H, substituted on the periphery with ≥1 group O[CHY(CHY)k]p[O(CHY)1Om(CHY)n]qOrX [each Y = H, C1-3 alkyl, halogen, CN; k, m, r = 0, 1; l, n, p = 1-10; q = 1-20; X = H, Me, cholesteryl, COR, CO2R, CR1R2R3; R = alkyl; R1-R3 = H, alkyl, alkoxy, (un) substituted Ph], the remaining of the 16 substitutable positions bearing H, alkyl, alkoxy, alkenyl, cholesteryl, CPh3, or (un) substituted Ph or PhO. These compds. are useful in a broad range

of applications, including electrooptical devices, and for use in optical recording media. 172599-60-9P

ΙT

(substituted phthalocyanines and optical recording media contg. them)

RN 172599-60-9 HCA

1

CN Poly(oxy-1,2-ethanediy1), α -methyl- ω -hydroxy-, ether with (SP-4-1)-[29H,31H-phthalocyanine-2,3,9,10,16,17,23,24octolato(2-)-N29,N30,N31,N32]copper (9CI) (CA INDEX NAME)

CM

CRN 123934-46-3 CMF C32 H16 Cu N8 O8 CCI CCS

$$\begin{array}{c} \text{HO} \\ \text{HO} \\ \text{N} \\ \text{N} \\ \text{N} \\ \text{OH} \\ \text{OH} \\ \end{array}$$

CM 2

9004-74-4 CRN CMF (C2 H4 O)n C H4 O CCI PMS

$$HO \longrightarrow CH_2 - CH_2 - O \longrightarrow n$$
 CH3

(substituted phthalocyanines and optical recording media contg. $\ensuremath{\mathsf{them}}\xspace)$

RE

(1) Anon; EP 0232427 A1 HCA

(2) Anon; EP 0433220 A2 HCA

(3) Anon; EP 0519423 A2 HCA (4) Anon; EP 0558449 A1 HCA

(5) Anon; GB 2200650 A HCA